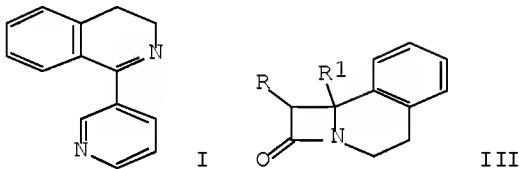


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 TITLE: Studies on fused  $\beta$ -lactams: synthesis and antibacterial activity of some pyridyl- and quinolyl-2-azetidinones  
 AUTHOR(S): Sharma, S. D.; Mehra, Usha; Pandhi, S. B.; Khurana, J. P. S.  
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- AB Coupling of nicotinic acid with PhCH<sub>2</sub>CH<sub>2</sub>NH<sub>2</sub> gives N-(2-phenylethyl)pyridine-3-carboxamide which on Bischler-Napieralski cyclization affords the imine I in a good yield. A similar sequence of reactions of 5-carboxyquinoline yields 1-(5-quinolyl)-3,4-dihydroisoquinoline (II). Annulation of I with RCH<sub>2</sub>COCl [R = PhO, 4-MeC<sub>6</sub>H<sub>4</sub>O, 2,4-C<sub>12</sub>C<sub>6</sub>H<sub>3</sub>O, 2-naphthoxy, 3,4-(MeO)<sub>2</sub>C<sub>6</sub>H<sub>3</sub>O, EtO<sub>2</sub>CCH:CM<sub>6</sub>NH] affords the  $\beta$ -lactams III (R<sub>1</sub> = 3-pyridyl) as single stereoisomers. Similarly, II furnishes (R<sub>1</sub> = 5-quinolyl). III have bactericidal activity at  $\geq 125 \mu\text{g/mL}$ .  
 IT 118990-93-5P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
       (preparation and cyclization of)  
 RN 118990-93-5 CAPLUS  
 CN 5-Quinoliniccarboxamide, N-(2-phenylethyl)- (9CI) (CA INDEX NAME)

